

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of: Dyrberg et al.

Serial No.: To Be Assigned

Group Art Unit: To Be Assigned

Filed: 1 June 2001

Examiner: To Be Assigned

For: Prevention of A Disease Having The Characteristics of Diabetes

**PRELIMINARY AMENDMENT**

Assistant Commissioner for Patents  
Washington, DC 20231

Sir:

Before the above-captioned application is taken up for examination, entry of the following amendment is respectfully requested:

**IN THE SPECIFICATION:**

At page 1, before the first line, insert

**--CROSS-REFERENCE TO RELATED APPLICATIONS**

This application is a continuation of USSN 09/319,138 filed 19 December 1997, which is a 35 U.S.C. 371 national application of PCT/DK96/00297 filed July 1, 1996 and claims priority under 35 U.S.C. 119 of Danish application 0765/95 filed June 30, 1995, the contents of which are fully incorporated herein by reference.--

**IN THE CLAIMS:**

Please cancel claims 1-7, and add the following new claims:

8. A method of treating type 1 diabetes in a mammal at risk of developing type 1 diabetes, which method comprises administering to a mammal a pharmaceutical composition comprising an effective amount of a hormonally inactive insulin analogue selected from the group consisting of desA1 human insulin, des(A1-A2) human insulin, des(A1-A3) human insulin, desA21 human insulin, des(B1-B5) human insulin, des(B1-B6) human insulin, des(B24-B30) human insulin, des(B25-B30) human insulin, Gly<sup>A2</sup> human insulin, Ala<sup>A2</sup> human insulin, Nle<sup>A2</sup> human insulin, Thr<sup>A2</sup> human insulin, Pro<sup>A2</sup> human insulin, D-allo Ile<sup>A2</sup> human insulin, Nva<sup>A3</sup> human insulin, Nle<sup>A3</sup> human insulin, Leu<sup>A3</sup> human insulin, Val<sup>A2</sup>, Ile<sup>A3</sup> human insulin, Abu<sup>A2</sup>, Abu<sup>A3</sup> human insulin, Gly<sup>A2</sup>, Gly<sup>A3</sup> human insulin, D-Cys<sup>A6</sup> human insulin, D-Cys<sup>A6</sup>, D-Cys<sup>A11</sup> human insulin, Ser<sup>A6</sup>, Ser<sup>A11</sup>, des(A8-A10) human insulin, D-Cys<sup>A7</sup> human insulin, D-Cys<sup>A11</sup> human insulin, Leu<sup>A19</sup> human insulin, Gly<sup>B6</sup> human insulin, Glu<sup>B12</sup> human insulin, Asn<sup>B12</sup> human insulin, Phe<sup>B12</sup> human insulin, D-Ala<sup>B12</sup> human insulin, and Asp<sup>B25</sup> human insulin.

9. The method of claim 8, wherein the mammal is a human being.

10. The method of claim 8, wherein the *in vitro* activity of the insulin analogue is less than 7% of the activity of human insulin.

11. The method of claim 8, wherein the insulin analogue is Asp<sup>B25</sup> human insulin.

12. A method of ameliorating type 1 diabetes in a mammal, comprising administering to the mammal an effective amount of a hormonally inactive insulin analogue selected from the group consisting of: desA1 human insulin, des(A1-A2) human insulin, des(A1-A3) human insulin, desA21 human insulin, des(B1-B5) human insulin, des(B1-B6) human insulin, des(B24-B30) human insulin, des(B25-B30) human insulin, Gly<sup>A2</sup> human insulin, Ala<sup>A2</sup> human insulin, Nle<sup>A2</sup> human insulin, Thr<sup>A2</sup> human insulin, Pro<sup>A2</sup> human insulin, D-allo Ile<sup>A2</sup> human insulin, Nva<sup>A3</sup> human insulin, Nle<sup>A3</sup> human insulin, Leu<sup>A3</sup> human insulin, Val<sup>A2</sup>, Ile<sup>A3</sup> human insulin, Abu<sup>A2</sup> Abu<sup>A3</sup> human insulin, Gly<sup>A2</sup> Gly<sup>A3</sup> human insulin, D-Cys<sup>A6</sup> human insulin, D-Cys<sup>A6</sup> D-Cys<sup>A11</sup> human insulin, Ser<sup>A6</sup> Ser<sup>A11</sup> des(A8-A10) human insulin, D-Cys<sup>A7</sup> human insulin, D-Cys<sup>A11</sup> human insulin, Leu<sup>A19</sup> human insulin, Gly<sup>B6</sup> human insulin, Glu<sup>B12</sup> human insulin, Asn<sup>B12</sup> human insulin, Phe<sup>B12</sup> human insulin, D-Ala<sup>B12</sup> human insulin, and Asp<sup>B25</sup> human insulin.

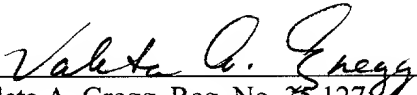
- [illegible]

## REMARKS

This amendment is provided to amend the specification to recite the relationship of this continuation application to previously filed applications, and to add claims to the patentable subject pursued in this application. No new matter is presented, and the Examiner is kindly requested to enter this amendment.

Respectfully submitted,

Date: 1 June 2001

  
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